

Claims

1. A probe (1) for electrical measurement methods,
which has a substrate (16)
5 on which at least one electrical component (4, 7) is
fitted
and which comes to rest on a test body (10),
wherein the probe (1) together with the substrate (16)
is sufficiently flexible that the probe (1) together
10 with the substrate (16) can be matched to different
radii of curvature of the test body (10),

characterized in that

15 two electrical components (4, 7) are fitted on the
substrate (16),
with the probe (1) having a flexible rear key (22)
which at least partially covers the at least one
electrical component (4, 7)
20 and which is used for ferromagnetic signal
amplification.

2. The probe as claimed in claim 1,
characterized in that
25 the substrate (16) is a flexible sheet.

3. The probe as claimed in claim 2,
characterized in that
the sheet (16) is formed from polyimide.
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4. The probe as claimed in claim 1,
characterized in that
at least one coil (4, 7) is fitted to the substrate
(16) as an electrical component, in particular a copper
35 coil (4, 7).

5. The probe as claimed in claim 1,
characterized in that
the flexible rear key (22) is formed by a polymer sheet
filled with ferrite.

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6. The probe as claimed in claim 1,
characterized in that
the flexible rear key (22) is formed by a flexible
metal sheet composed of a ferrite material.

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7. The probe as claimed in claim 1,
characterized in that
the flexible rear key (22) is formed by a plastically
deformable encapsulation compound (34), in particular
filled with ferrite particles.

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8. The probe as claimed in claim 1,
characterized in that
the probe (1) has at least one coil (4, 7) as an
electrical component, which is arranged in a planar
manner on the substrate (16).

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9. The probe as claimed in claim 1,
characterized in that
the probe (1) is a probe (1) for eddy current
measurement.

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10. The probe as claimed in claim 1,
characterized in that
the probe (1) has ferromagnetic signal amplification
(22).

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11. The probe as claimed in claim 1,
characterized in that
the probe (1) can be matched to radii of curvature of
down to 50 mm.

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12. Use of a flexible probe as claimed in one of the
preceding claims for production of an inflexible probe,
with the flexible probe, which has flexible curable
encapsulation compound as the rear key (22), being
10 matched to a curved surface and being cured in this
form.